

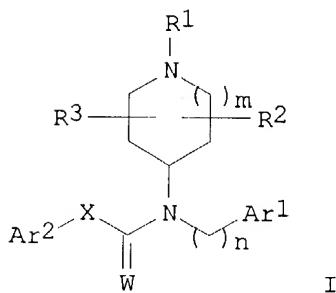
10/601,070

STN Structure Search
93.04

> d ibib abs hitstr 1-4

L4 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2004:451629 CAPLUS
 DOCUMENT NUMBER: 141:23543
 TITLE: Preparation of N-substituted piperidine derivatives as serotonin receptor agents
 INVENTOR(S): Andersson, Carl-Magnus; Schlienger, Nathalie; Fejzic, Alma; Hansen, Eva Louise; Pawlas, Jan Swed.
 PATENT ASSIGNEE(S):
 SOURCE: U.S. Pat. Appl. Publ., 44 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004106600	A1	20040603	US 2003-601070	20030620
PRIORITY APPLN. INFO.:			DK 2002-973	A 20020624
			US 2002-391269P	P 20020624
OTHER SOURCE(S):	MARPAT 141:23543			
GI				



AB Disclosed herein are compds. of formula (I), pharmaceutically acceptable salts, amides, esters, or prodrugs thereof [whewrein R1 = each (un)substituted heterocycll or heterocycll-C1-6 alkyl; R2, R3 = H, C1-6 alkyl, or halogen or such that R2 together with R3 forms a ring; m = 0, 1, 2; n = 1, 2, 3; Ar1 = each (un)substituted aryl or heteroaryl; W = O, S; X = each (un)substituted methylene, ethylene, propylene, or vinylene, CH2NR (wherein R = H, C1-6 alkyl); Ar2 = each (un)substituted aryl or heteroaryl]. Also disclosed are. (1) methods of inhibiting an activity of a monoamine receptor comprising contacting the monoamine receptor or a system containing the monoamine receptor with an effective amount of one or more of the compds. of formula I, (2) methods of inhibiting an activation of a monoamine receptor comprising contacting the monoamine receptor or a system containing the monoamine receptor with an effective amount of one or more of the compds. of formula I, and (3) methods of treating a disease condition associated with a monoamine receptor, in particular serotonin receptor 5-HT2A subclass. The disease condition is selected from (a) the group consisting of schizophrenia, schizoaffective disorders, psychosis, drug induced psychosis, and side effects observed with the treatment of chronic neurodegenerative disorders with a selective serotonin reuptake inhibitor (SSRI), wherein said neurodegenerative disorder is selected from

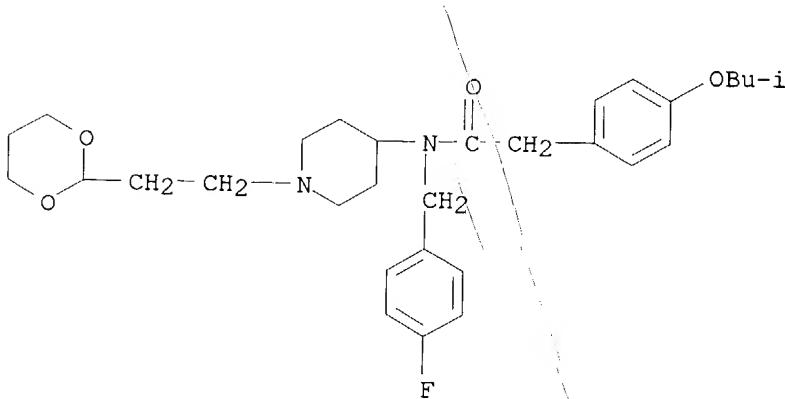
Alzheimer's disease, Parkinson's disease, Lewy body dementia, frontotemporal dementia, spinocerebellar atrophy, and Huntington's disease, and (b) the group consisting of Reynaud's Phenomena, migraine, hypertension, thrombosis, vasospasm, ischemia, depression, anxiety, motor tics, Tourette's syndrome, dyskinesias, on/off phenomena, tremor, rigidity, bradykinesia, psychomotor slowing, addiction, including alc. addiction, opioid addiction, and nicotine addiction, sleep disorders, appetite disorders, and decreases in libido and ejaculatory problems. Thus, N-(4-fluorobenzyl)-2-(4-isobutoxyphenyl)-N-[1-[3-(4-(S)-isopropyl-2-oxooxazolidin-3-yl)propyl]piperidin-4-yl]acetamide oxalate, which was prepared by alkylation of N-(4-fluorobenzyl)-2-(4-isobutoxyphenyl)-N-piperidin-4-ylacetamide with (4S)-3-(3-chloropropyl)-4-isopropylloxazolidin-2-one, inhibited 5-HT2A receptor by 104% in a receptor selection and amplification (R-SAT) assay using NIH3T3 cells.

IT 639861-75-9P, N-[1-[2-(1,3-Dioxan-2-yl)ethyl]piperidin-4-yl]-N-(4-fluorobenzyl)-2-(4-isobutoxyphenyl)acetamide 639862-90-1P, N-[1-[2-(1,3-Dioxan-2-yl)ethyl]piperidin-4-yl]-N-(4-fluorobenzyl)-2-(4-isopropylphenyl)acetamide 639862-92-3P, N-[1-[2-(1,3-Dioxan-2-yl)ethyl]piperidin-4-yl]-N-(4-fluorobenzyl)-2-(4-trifluoromethoxyphenyl)acetamide 639863-26-6P, N-(4-Fluorobenzyl)-2-(4-isobutoxyphenyl)-N-[1-[3-(2-oxopiperidin-1-yl)propyl]piperidin-4-yl]acetamide
 RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(intermediate; preparation of N-substituted piperidine derivs. as serotonin receptor inhibitors for treating symptoms, diseases and disorders associated with monoamine receptors, including serotonin receptors)

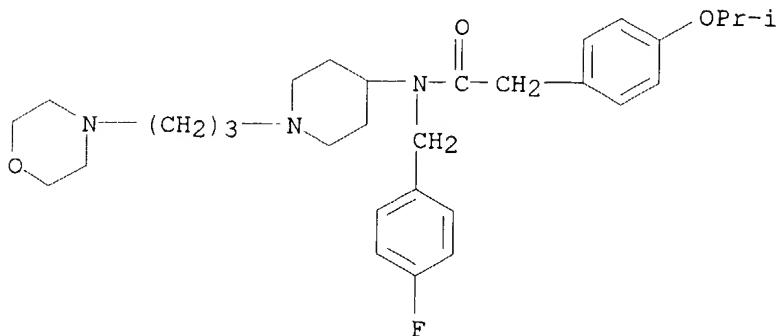
RN 639861-75-9 CAPLUS

CN Benzeneacetamide, N-[1-[2-(1,3-dioxan-2-yl)ethyl]-4-piperidinyl]-N-[(4-fluorophenyl)methyl]-4-(2-methylpropoxy)-(9CI) (CA INDEX NAME)



RN 639862-90-1 CAPLUS

CN Benzeneacetamide, N-[1-[2-(1,3-dioxan-2-yl)ethyl]-4-piperidinyl]-N-[(4-fluorophenyl)methyl]-4-(1-methylethyl)-(9CI) (CA INDEX NAME)

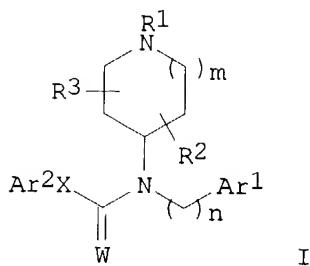


Answer

L4 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2004:2854 CAPLUS
 DOCUMENT NUMBER: 140:77030
 TITLE: Preparation of 1,4-disubstituted piperidines as serotonin 5-HT2A inverse agonists.
 INVENTOR(S): Andersson, Carl-magnus; Schlienger, Nathalie; Fejzic, Alma; Hansen, Eva Louise; Pawlas, Jan
 PATENT ASSIGNEE(S): Acadia Pharmaceuticals Inc., USA
 SOURCE: PCT Int. Appl., 103 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

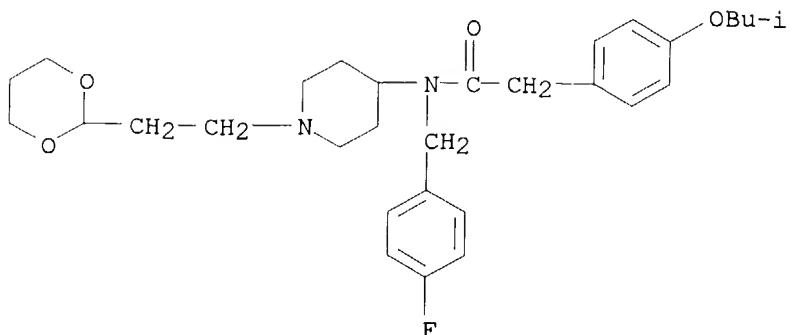
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004000808	A2	20031231	WO 2003-US19797	20030620
WO 2004000808	A3	20040325		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: US 2002-391269P P 20020624
 OTHER SOURCE(S): MARPAT 140:77030
 GI



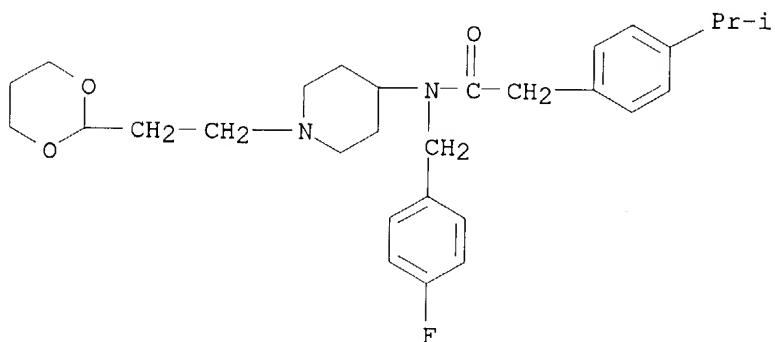
AB Title compds. [I; R1 = (substituted) heterocyclyl, heterocyclylalkyl; R2, R3 = H, alkyl, halo; R2R3 = atoms to form a ring; m = 0-2; n = 1-3; Ar1 = (substituted) aryl, heteroaryl; W = O, S; X = (substituted) methylene, ethylene, propylene, vinylene, CH2N(Rn); Rn = H, alkyl; Ar2 = (substituted) aryl, heteroaryl], were prepared. Thus, a mixture of N-(4-fluorobenzyl)-N-(piperidin-4-yl)-2-(4-isobutoxyphenyl)acetamide, K2CO3, NaI, and (4S)-3-(3-chloropropyl)-4-isopropyloxazolidinon-2-one were stirred overnight to give 71% N-(4-fluorobenzyl)-2-(4-isobutoxyphenyl)-N-[1-[3-(4-(S)-isopropyl-2-oxooxazolidin-3-yl)propyl]piperidin-4-yl]acetamide oxalate (117NLS01). The latter showed pIC50 = 9.7 for repression of 5-HT2A receptor activity.

IT
 639861-39-5P 639861-40-8P 639861-42-0P
 639861-43-1P 639861-44-2P 639861-45-3P
 639861-46-4P 639861-47-5P 639861-50-0P
 639861-53-3P 639861-56-6P 639861-59-9P
 639861-62-4P 639861-63-5P 639861-64-6P
 639861-67-9P 639861-70-4P 639861-73-7P
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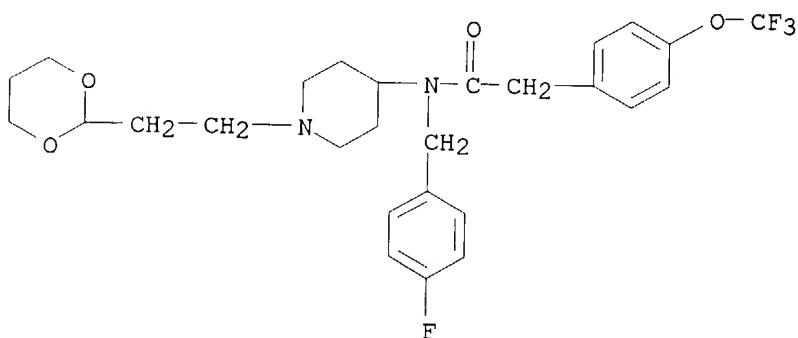
RN 639862-90-1 CAPLUS

CN Benzeneacetamide, N-[1-[2-(1,3-dioxan-2-yl)ethyl]-4-piperidinyl]-N-[(4-fluorophenyl)methyl]-4-(1-methylethyl)- (9CI) (CA INDEX NAME)



RN 639862-92-3 CAPLUS

CN Benzeneacetamide, N-[1-[2-(1,3-dioxan-2-yl)ethyl]-4-piperidinyl]-N-[(4-fluorophenyl)methyl]-4-(trifluoromethoxy)- (9CI) (CA INDEX NAME)



L4 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:836853 CAPLUS

DOCUMENT NUMBER: 139:337978

TITLE: Preparation of N-substituted pyridinone and

pyrimidinone derivatives for use as Lp-PLA2 inhibitors
in the treatment of atherosclerosis

INVENTOR(S): Leach, Colin Andrew; Smith, Stephen Allan

10/601,070

PATENT ASSIGNEE(S) : Glaxo Group Limited, UK
SOURCE: PCT Int. Appl., 38 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003086400	A1	20031023	WO 2003-GB1544	20030410
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

PRIORITY APPLN. INFO.: GB 2002-8279 A 20020410
OTHER SOURCE(S): MARPAT 139:337978
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. [I; R1 = (un)substituted aryl; R2 = halo, alkyl, alkoxy, etc.; R3 = H, halo, alkyl, hydroxyalkyl; R2 and R3 together with the pyridone or pyrimidone ring carbons to which they are attached form (un)substituted fused 5-6 membered carbocyclic ring, fused benzo or heteroaryl ring; R4 = alkyl substituted by 5-7 membered saturated heterocyclyl comprising N and optionally O or S; R5 = (un)substituted (hetero)aryl; R6 = (un)substituted (hetero)aryl; X = CH, N; Y = alkylene, CH:CH, (CH₂)_nS; n = 1-3] that are inhibitors of the enzyme Lp-PLA₂ and are of use in therapy, in particular for treating atherosclerosis, were prepared Thus, amidation of 2-[2-(2,3-difluorobenzylthio)-4-oxo-4H-quinolin-1-yl]acetic acid with N-(1-thiazol-2-ylmethylpiperidin-4-yl)-4'-trifluoromethylbiphen-4-ylmethylamine (preps. given) afforded the quinolinone II. The exemplified compds. I showed IC₅₀ values in the range <0.1 to 100 nM against Lp-PLA₂.

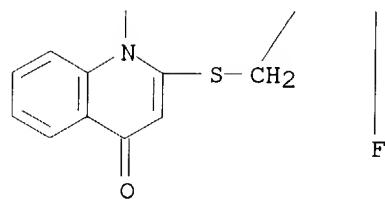
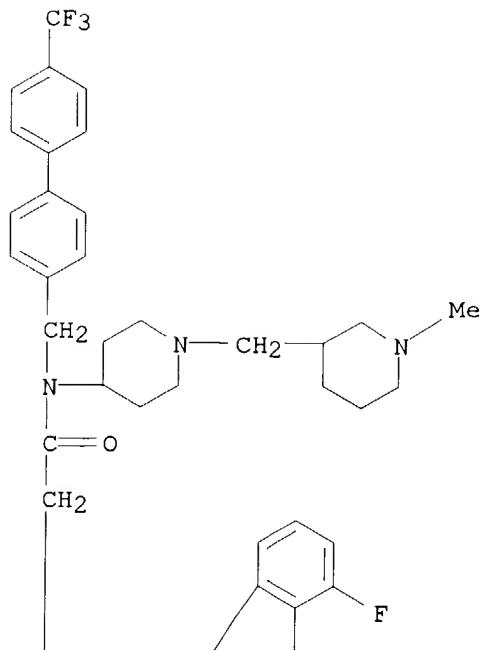
IT 615577-27-0P 615577-28-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of pyridinone and pyrimidinone derivs. for use as Lp-PLA₂ inhibitors in the treatment of atherosclerosis)

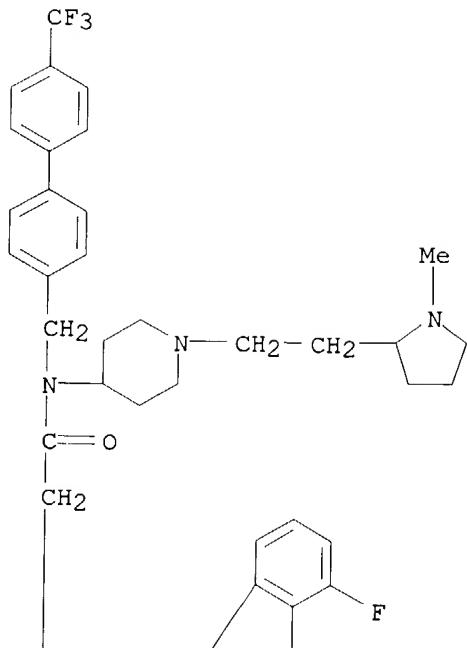
RN 615577-27-0 CAPLUS

CN 1(4H)-Quinolineacetamide, 2-[[[(2,3-difluorophenyl)methyl]thio]-N-[1-[(1-methyl-3-piperidinyl)methyl]-4-piperidinyl]-4-oxo-N-[[4'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]methyl]- (9CI) (CA INDEX NAME)

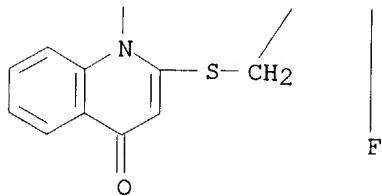


RN 615577-28-1 CAPLUS
CN 1(4H)-Quinolineacetamide, 2-[(2,3-difluorophenyl)methyl]thio]-N-[1-[2-(1-methyl-2-pyrrolidinyl)ethyl]-4-piperidinyl]-4-oxo-N-[(4'-(trifluoromethyl)[1,1'-biphenyl]-4-yl)methyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



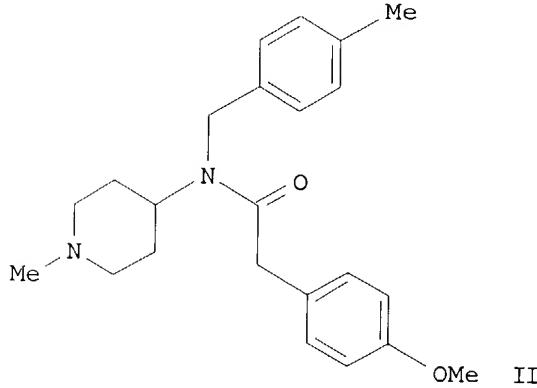
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2001:676749 CAPLUS
 DOCUMENT NUMBER: 135:242140
 TITLE: Preparation of N-piperidinyl-N-alkyl-acetamides and
N,N,N'-substituted ureas as 5-HT2A inverse
agonists/antagonists
 INVENTOR(S): Andersson, Carl M.; Croston, Glenn; Hansen, E. L.;
Uldam, A. K.
 PATENT ASSIGNEE(S): Acadia Pharmaceuticals, Inc., USA
 SOURCE: PCT Int. Appl., 150 pp.
 CODEN: PIIXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2001066521	A1	20010913	WO 2001-US7187	20010306
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US 2002004513	A1	20020110	US 2001-800096	20010306
EP 1263729	A1	20021211	EP 2001-914716	20010306
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2003531829	T2	20031028	JP 2001-565339	20010306
BR 2001008977	A	20040106	BR 2001-8977	20010306
ZA 2002005902	A	20031023	ZA 2002-5902	20020723
US 2003220316	A1	20031127	US 2003-409782	20030407
US 6756393	B2	20040629		
PRIORITY APPLN. INFO.:			US 2000-187289P	P 20000306
			US 2001-800096	A1 20010306
			WO 2001-US7187	W 20010306

OTHER SOURCE(S): MARPAT 135:242140
GI



AB Title compds. Ar₁-Y₂-Y₁-N(Z)-C:W-X₁-X₂-Ar₂ [Z = NR-substituted piperidinyl, tropanyl, azetidinyl, etc.; R = H, cyclic/straight-chain acyclic organyl group, hydroxyalkyl, aminoalkyl, aralkyl or heteroaralkyl group; X₁ = CH₂, vinylene, NH or N-alkyl; X₂ = CH₂, or, when X₁ = CH₂ or vinylene, X₂ = CH₂ or a bond; or when X₁ is CH₂, X₂ = O, S, NH, N(lower alkyl) or a bond; Y₁ = CH₂ and Y₂ = CH₂, vinylene, ethylene, propylene, bond; or Y₁ = bond and Y₂ = vinylene; or Y₁ = ethylene and Y₂ = O, S, NH, N(lower alkyl); Ar₁ and Ar₂ = (un)substituted (hetero)aryl provided that Ar₁ and Ar₂ are not simultaneously phenyl; W = O, S; I] were prepared Examples include over 130 compds. synthesized, 5 serotonin receptor binding assays and 3 in-vivo models. For instance, 4-methylbenzylamine was reductively alkylated with 1-methyl-4-piperidone (MeOH, HOAc, NaCNBH₃, 20 h., room temperature). The resulting amine was alkylated with 4-methoxyphenylacetyl chloride (DCM, 4 h., room temperature) to give II, isolated as the hydrochloride salt and subsequently purified by chromatog. Many of the examples had pIC₅₀ (-log IC₅₀) = 7.8 - 9.0 for HT2A. I are

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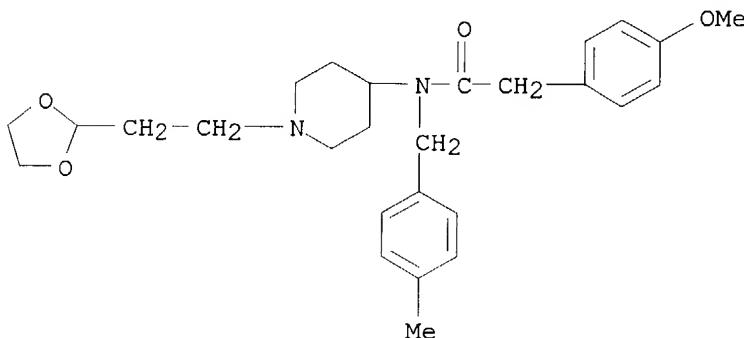
used for the treatment of disease in which modification of serotonergic receptor activity has a beneficial effect.

IT 359881-45-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug; preparation of N-piperidinyl-N-alkyl-aryl-acetamides and
N,N,N'-substituted ureas as 5-HT2A inverse agonists)

RN 359881-45-1 CAPLUS

CN Benzeneacetamide, N-[1-[2-(1,3-dioxolan-2-yl)ethyl]-4-piperidinyl]-4-methoxy-N-[(4-methylphenyl)methyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT:

2

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

(FILE 'HOME' ENTERED AT 10:16:14 ON 03 SEP 2004)

FILE 'REGISTRY' ENTERED AT 10:16:27 ON 03 SEP 2004

L1 STRUCTURE uploaded

L2 O S L1

L3 205 S L1 FULL

FILE 'CAPLUS' ENTERED AT 10:17:32 ON 03 SEP 2004

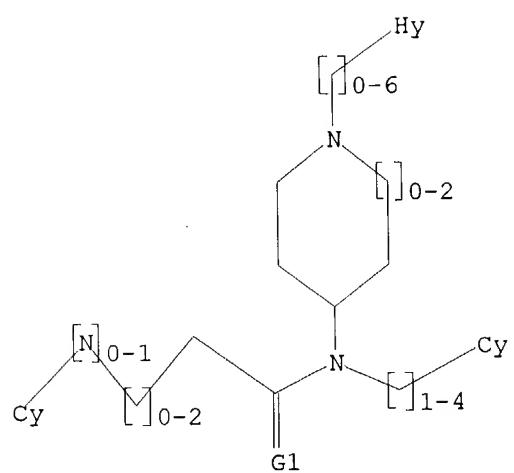
L4 4 S L3

=> d l1

L1 HAS NO ANSWERS

L1 STR

10/601,070



G1 O, S

Structure attributes must be viewed using STN Express query preparation.

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